

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	9254	valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 14:56
S2	103	S1 and ((wavelets\$1 or FFT or Fourier or spectrum or spectral) with (analy\$4 or decompos\$5 or component\$1 or harmonic\$1 or coefficient\$1))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/06 09:47
S3	17	S2 and ((likelihood or probabilit\$3) with (valve\$1 or defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 20:34
S6	9336	(valve\$1) with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down) or degradation\$1) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$4 or measur\$5 or sens\$3 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/28 13:38
S8	4815	S6 and (((flow with rate\$1) or (process adj variable\$1) or (operat\$3 with control\$4)) with valve\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 21:00
S9	188	S8 and ( ((flow adj rate) with valve) same (adjust\$5 with (open\$3 or control\$4) with valve))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 21:00
S10	0	S9 and (valve\$1 with (likelihood or probabilit\$3) with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 20:34
S11	2	S9 and ((wavelets\$1 or FFT or Fourier or spectrum or spectral) with (analy\$4 or decompos\$5 or component\$1 or harmonic\$1 or coefficient\$1))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 20:36
S12	41	S8 and ((wavelets\$1 or FFT or Fourier or spectrum or spectral) with (analy\$4 or decompos\$5 or component\$1 or harmonic\$1 or coefficient\$1))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 20:36
S13	0	S8 and ( (stick adj phase) with (slip adj phase))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 21:02

## EAST Search History

S14	0	S8 and ( (stick adj phase) same (slip adj phase))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 21:01
S15	0	S8 and ( (stick adj phase) and (slip adj phase))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 21:01
S16	8	( (stick adj phase) and (slip adj phase))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 21:01
S17	12	S8 and ( (stick) with (slip))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/11/06 21:03
S18	286	702/35.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/09 12:09
S19	0	702/35.ccls. and (defect\$3 same valve same indexe\$1 same (resolution or level))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:04
S20	5	(defect\$3 same valve same indexe\$1 same (resolution or level))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/10/30 16:30
S21	2	"5646600".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:03
S22	1071	702/182.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:04
S23	327	702/181.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:04
S24	0	S22 and (defect\$3 same valve same indexe\$1 same (resolution or level))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:04

## EAST Search History

S25	1	S21 and valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:05
S26	10	S22 and valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/06 09:40
S27	4	S23 and valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:06
S28	667	73/9.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:06
S29	4	S28 and valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/11 11:40
S30	0	charles with zhan	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:40
S31	663	340/679.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:40
S32	10	S31 and valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 12:41
S33	0	charles with zhan	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 14:48
S34	61	joseph with lu	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 14:56
S35	0	S34 and (valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/06 14:56

## EAST Search History

S36	24478	(valve\$1 or machine\$2) with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/20 14:25
S37	1055	S36 and (likelihood or probability or percentage) with (defect\$4 or fail\$4 or error\$5 or fault)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/20 14:26
S38	809	S36 and (likelihood or probability) with (defect\$4 or fail\$4 or error\$5 or fault)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/06 09:44
S39	266	S36 and (likelihood or probabilit\$3) with (defect\$4 or fail\$4 or error\$5 or fault) with (calculat\$3 or estimat\$3 or generat\$3 or identify\$3 or analy\$4 or measur\$5 or determin\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/06 10:13
S40	47	S39 and ((wavelet\$1 or FFT or Fourier or spectrum or spectral) with (analy\$4 or decompos\$5 or component\$1 or harmonic\$1 or coefficient\$1))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/06 09:59
S41	5	S36 and (likelihood or probabilit\$3) near4 (index or factor) with (defect\$4 or fail\$4 or error\$5 or fault) with (calculat\$3 or estimat\$3 or generat\$3 or identify\$3 or analy\$4 or measur\$5 or determin\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/06 10:24
S42	0	S36 and (likelihood or probabilit\$3) near4 (coefficient) with (defect\$4 or fail\$4 or error\$5 or fault) with (calculat\$3 or estimat\$3 or generat\$3 or identify\$3 or analy\$4 or measur\$5 or determin\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/06 10:26
S43	1	(valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) same (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5) same ((likelihood or probabilit\$3) near4 (factor or index or coefficient) with (defect\$4 or fail\$4 or error\$5 or fault)) same (calculat\$3 or estimat\$3 or generat\$3 or identify\$3 or analy\$4 or measur\$5 or determin\$3)).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/06 10:31

## EAST Search History

S44	1	(valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) same (detect\$3 or identif\$7 or monitor\$3 or diagnos\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5) same ((likelihood or probabilit\$3) near4 (factor or index or coefficient) with (defect\$4 or fail\$4 or error\$5 or fault)) same (calculat\$3 or estimat\$3 or generat\$3 or identify\$3 or analy\$4 or measur\$5 or determin\$3)).clm.	US-PGPUB	OR	ON	2006/01/06 10:32
S45	2	(valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) same (detect\$3 or identif\$7 or monitor\$3 or diagnos\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5) same ((likelihood or probabilit\$3) with (defect\$4 or fail\$4 or error\$5 or fault)) same (calculat\$3 or estimat\$3 or generat\$3 or identify\$3 or analy\$4 or measur\$5 or determin\$3)).clm.	US-PGPUB	OR	ON	2006/06/20 14:26
S46	7	73/587.ccls. and valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/11 11:41
S47	4243	(valve\$1 or machine\$2) with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5)	US-PGPUB	OR	ON	2006/06/20 14:25
S48	2	(valve\$1 with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) same (detect\$3 or identif\$7 or monitor\$3 or diagnos\$4 or measur\$5 or sens\$3 or analy\$4 or judg\$5) same ((likelihood or probabilit\$3) with (defect\$4 or fail\$4 or error\$5 or fault)) same (calculat\$3 or estimat\$3 or generat\$3 or identify\$3 or analy\$4 or measur\$5 or determin\$3)).clm.	US-PGPUB	OR	ON	2006/06/20 14:27
S49	88	702/35.ccls.	US-PGPUB	OR	ON	2007/06/28 13:37
S50	13	S47 and S49	US-PGPUB	OR	ON	2006/06/20 14:28
S51	327	702/182.ccls.	US-PGPUB	OR	ON	2006/06/20 14:28
S52	24	S47 and S51	US-PGPUB	OR	ON	2006/06/20 14:28
S53	3506	((702/35,182,181) or (73/9)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/28 13:37

## EAST Search History

S54	12788	(valve\$1) with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down) or degradation\$1) with (detect\$3 or identif\$7 or monitor\$3 or diagnos\$\$4 or measur\$5 or sens\$3 or judg\$5 or analy\$5 or determin\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/28 14:11
S55	40	S53 and S54	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/28 13:39
S56	1	((generat\$3 or produc\$3 or creat\$3) with (index or tag or number or id or reference or indicat\$3) with resolution with (identifying or representat\$3 or function or relationship) with (likelihood or probability) same valve with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) same (determine\$3 or obtain\$3 or produc\$3 or generat\$3 or calculate\$3) with probability with resolution).clm.	US-PGPUB	OR	ON	2007/06/28 14:24
S57	1	((generat\$3 or produc\$3 or creat\$3) with (index or tag or number or id or reference or indicat\$3) with resolution with (identifying or representat\$3 or function or relationship) with (likelihood or probability) same valve with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down))).clm.	US-PGPUB	OR	ON	2007/06/28 14:22
S58	1	((generat\$3 or produc\$3 or creat\$3) with (index or tag or number or id or reference or indicat\$3) with resolution with (identifying or representat\$3 or function or relationship) with (likelihood or probability)).clm.	US-PGPUB	OR	ON	2007/06/28 14:23
S59	3506	((702/35,182,181) or (73/9)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/28 14:22
S60	1	((generat\$3 or produc\$3 or creat\$3) with (index or tag or number or id or reference or indicat\$3) with resolution with (identifying or representat\$3 or function or relationship) with (likelihood or probability) same valve with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down))).clm.	US-PGPUB	OR	ON	2007/06/28 14:22
S61	0	S59 and S60	US-PGPUB	OR	ON	2007/06/28 14:22
S62	1	((generat\$3 or produc\$3 or creat\$3) with (index or tag or number or id or reference or indicat\$3) with resolution with (identifying or representat\$3 or function or relationship) with (likelihood or probability)).clm.	US-PGPUB	OR	ON	2007/06/28 14:23

## EAST Search History

S63	1	((generat\$3 or produc\$3 or creat\$3) with (index or tag or number or id or reference or indicat\$3) with resolution with (identifying or representat\$3 or function or relationship) with (likelihood or probability) same valve with (defect\$4 or fail\$4 or fault or flaw\$1 or malfunction or breakdown or (break adj down)) same (determine\$3 or obtain\$3 or produc\$3 or generat\$3 or calculate\$3) with probability with resolution).clm.	US-PGPUB	OR	ON	2007/06/28 14:24
S64	0	S59 and S62	US-PGPUB	OR	ON	2007/06/28 14:24
S65	0	S59 and S63	US-PGPUB	OR	ON	2007/06/28 14:24